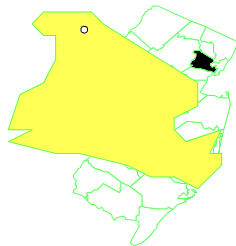


CALDWELL TRUCKING NEW JERSEY

EPA ID# NJD048798953



EPA REGION 2
CONGRESSIONAL DIST. 11
Essex County
Fairfield Township

Other Names:
Fairfield Boro Site

Site Description

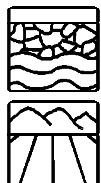
The Caldwell Trucking Site consists of properties and ground water contaminated by the disposal of residential, commercial, and industrial septic waste. Caldwell Trucking disposed of these wastes in unlined lagoons on its 11-acre property from the early 1950s until 1973. After 1973, Caldwell installed underground storage tanks for the storage of these wastes. By 1984, the tanks were no longer used, and Caldwell operated solely as a transport facility until 1988, when it ceased operations. Other industrial facilities in the area may also have contributed to the ground water contamination. There are about 500 single family homes located in a populated area within one mile of the site. Since 1981, over 300 private wells in the area have been taken out of service due to contamination. The affected residences have been connected to the municipal drinking water supply system. The contaminated ground water plume originating from the site flows north towards the Passaic River, which is used for recreational activities and as a source of drinking water.

Site Responsibility: This site is being addressed through Federal and responsible party actions.

NPL LISTING HISTORY

Proposed Date: 12/01/82
Final Date: 09/01/83

Threats and Contaminants



Ground water is contaminated with hazardous substances, including trichloroethylene and 1,1,1-trichloroethane. Metals, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs) were detected in the subsurface soils on the Caldwell Trucking property. Lead and other metals were also detected in surface soils. VOCs were detected in surface waters near the site, in a tributary to Deepavaal Brook, the brook itself, and the Passaic River. Drinking contaminated ground water is a potential health threat. Other potential health threats include exposure related to direct contact or accidental ingestion of contaminated surface water or soils.

Cleanup Approach

Site cleanup is being addressed in three stages: immediate actions and two long-term remedial phases focusing on the cleanup of contaminated soils and ground water.

Response Action Status



Immediate Actions: Several actions were implemented in 1990 to reduce the potential for exposure to site contaminants. Chain-link gates and fences were installed to restrict site access. The exposed lagoon and the four underground storage tanks were covered and surrounded with snow fencing. To minimize exposure of trespassing dirt bike riders to hazardous substances, portions of an access road were covered with geotextile fabric and stone. Warning signs were posted on the fences and at the entrance to the site.



1986 Record of Decision: In September 1986, the first of two Records of Decision (RODs) was signed. The selected cleanup included: (1) restoring a lost potable water resource by providing treatment, through air-stripping, of Municipal Water Supply Well No. 7; (2) providing an alternate water supply for residents potentially affected by ground water contamination from the site; and (3) excavating and treating approximately 28,000 cubic yards of contaminated soils and waste materials via low temperature thermal treatment, and disposing of treated soils in a secure landfill to be constructed at the site in accordance with Resource Conservation and Recovery Act (RCRA) requirements.

The Township of Fairfield subsequently decided not to use Municipal Well No. 7, and instead rely on the Passaic Valley Water Commission as an alternative potable water supply for the entire community. Accordingly, EPA issued an Explanation of Significant Differences (ESD) in May 1991, to delete the provision of well-head treatment for Municipal Well No. 7 as a component of the remedy.

During the remedial design for the contaminated soils and waste materials, studies revealed new information about the levels and combinations of contaminants in the soils and sludge materials at the site. This information indicated that additional treatment before disposal was necessary to conform with RCRA disposal regulations.

In February 1993, EPA issued another ESD to explain modifications to this component of the 1986 ROD, and to document the increased cost of the remedial action. The modified remedy included off-site treatment and disposal of certain waste materials, and stabilization of the lead contaminated soils to meet RCRA disposal regulations. The stabilization process would also reduce the VOCs remaining in the soils prior to disposal in the on-site hazardous waste landfill.

On April 19, 1993, EPA issued a unilateral administrative order (UAO) to 11 potentially responsible parties (PRPs) to implement this modified remedy. In late 1993, the PRPs started initial construction activities, including site clearing and drum consolidation.

On February 3, 1994, the PRPs formally requested permission to prepare a focused feasibility study (FFS) to evaluate an alternative remedy for the remaining soil contamination at the site. The alternate remedy included excavation and off-site disposal of highly contaminated wastes, as described in the existing remedy. In addition, soils with VOC concentrations greater than 100 milli-

grams per kilogram (mg/kg) would be excavated and disposed of off-site, and the remaining contaminated waste stabilized or solidified in place. The FFS compared the existing remedy with this alternate remedy. The FFS concluded that a hazardous waste landfill would no longer be necessary because the off-site disposal of highly contaminated wastes, together with on-site stabilization/solidification of the remaining contaminated wastes, would be protective of human health and the environment. In February 1995, EPA signed a Record of Decision Amendment, formally changing the 1986 ROD remedy to the alternate remedy.




1989 Record of Decision: In September 1989, the second ROD for the site was signed. The selected remedy required the installation of ground water recovery wells at various locations throughout the study area to intercept the entire contaminated ground water plume. The 1989 ROD also provided for a contingency remedy if EPA could not obtain community acceptance regarding access to the properties needed for implementation of the selected remedy.

In 1993, after much discussion and debate with the community, EPA determined that local property owners would not provide the necessary access. EPA then issued an ESD explaining its intent to implement the contingency remedy. The contingency remedy includes installation of ground water recovery wells to intercept the most contaminated portions of ground water in the lower water table aquifer and the upper bedrock aquifer. An air stripper would be constructed on-site to treat the extracted ground water, and the treated effluent would be discharged to the Passaic River. The remedy also includes cleanup of a spring that is recharged with contaminated ground water and flows into a tributary to Deepavaal Brook, and a program for the sealing of all private wells in the contaminated ground water plume, some of which are still being used for non-potable (non-drinking) purposes, such as irrigation.

On June 29, 1993, EPA issued a UAO to 15 PRPs to conduct studies to evaluate the current hydrologic conditions in the contaminated ground water aquifers and effects the site may have on the Passaic River. This study was completed in October 1994.

In November 1994, EPA, the New Jersey Department of Environmental Protection and the U.S. Department of Interior signed a consent decree with the PRPs. The PRPs agreed to perform the remedial work necessary to contain the contaminated ground water plume, in addition to the site work being done according to the UAO's.

Cleanup Progress  (Actual Construction Underway)

Operable Unit-1:

In the summer of 1989, EPA connected 55 homes and 9 commercial establishments in the contaminated ground water plume area to the municipal water system.

In May 1994, the PRPs installed a seven-foot high security fence around the entire site. In September 1994, approximately 1650 cubic yards (2640 tons) of contaminated material was excavated and disposed of off-site.

Construction of the soil stabilization phase of the remedial action started in August 1995. In October 1995, the PRPs suspended the stabilization activities due to high levels of odors and emissions coming from the soils. In November 1995, the PRPs proposed to construct a soil vapor extraction

(SVE) system to reduce the levels of odors and emissions during stabilization activities. EPA approved the PRPs request, and in June 1996, the PRPs started the SVE system. The PRPs operated the SVE system from June 1996 to March 1997, and removed over 25,000 pounds of VOCs (over 12 tons) from the soil. In March 1997, the PRPs restarted stabilization activities and completed the work in September 1997. Approximately 40,000 cubic yards (64,000 tons) of contaminated soils were stabilized. In October 1997, EPA was informed by the site owner of a new area of contamination. In September 1998, the PRPs stabilized an additional approximately 1,000 cubic yards of lead-contaminated soils. In February 2001, the PRPs found additional lead contaminated-soils in the North Lagoon Area of the site. The PRPs delineated the extent of contamination and submitted plans for the cleanup of the contamination in June 2002. The PRPs obtained approval from EPA and the NJDEP for completing the stabilization of the remaining lead contaminated soils in July 2003. The soil stabilization contract was awarded in August 2003 and work began in early September 2003. However, a contaminated drum and two tanks containing contaminated material were discovered which prevented the completion of the work in October. Since then, the drum and tanks have been removed, and contaminated soils have been excavated. Post-ex samples indicate the presence of petroleum hydrocarbons in the soil. The contractor will re-mobilize at the site to conduct additional sampling of the hydrocarbons in the soil as soon as weather permits. Once the volume of contaminated soils is determined a decision will be made on their disposition. In addition, wetlands restoration at the site will be conducted in spring 2004.

Operable Unit-2:

In February 1997, EPA modified the ground water remedial action schedule, and allowed the PRPs to test the effectiveness of an innovative technology, an iron reactive wall system, to intercept the contaminated ground water before it discharges at a surface water seep. In May 1998, the PRPs completed construction of the iron wall. Monitoring results on the effectiveness of the iron wall indicate that the wall has reduced the VOC levels in the seep but not to acceptable levels. In February 2002, the PRPs completed installation of an additional treatment system to reduce the levels of contamination reaching the seep. In October 2000, the PRPs requested permission to pilot test an enhanced biological treatment system in the VOC source area at the site. From January 2001 to July 2002, the PRPs conducted the pilot test. Results from the pilot test indicate that enhanced biological treatment system appears to be reducing the level of VOCs in the source area at the site. The PRPs requested permission from EPA to perform a Focused Feasibility Study (FFS) for the purpose of amending the current ground water extraction and treatment system remedy. EPA has reviewed the PRPs' request to begin work on the FFS. Approval to begin work on the FFS was granted to the PRPs in May 2003. The FFS is scheduled to be submitted to EPA by the end of January 2004.

Environmental Progress



With the excavation and off-site disposal of some contaminated material and stabilization of the remaining contaminated soil and waste materials at the site, nearly all on-site contamination has now been removed or rendered harmless. The use of an alternate drinking water supply by affected homes and businesses in the area of the Caldwell Trucking Site has significantly reduced the potential for exposure to contaminated ground water.

Site Repository



Fairfield Town Hall Building, Engineering Department, 230 Fairfield Road, Fairfield, NJ 07004

